

# SELF-INJURY

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## **Introduction**

Self-injury (SI), also called self-mutilation or cutting, is a highly stigmatized emotional disorder. SI is the repetitive, deliberate infliction of harm to one's own body. Injuries are severe enough to cause tissue damage and include cutting, carving, scratching, burning, bruising, biting, hitting, bone-breaking, skin picking, hair pulling, branding, and marking (Martinson, 1998; Boesky, 2002). The information contained in this section specifically addresses non-suicidal self-injurious behaviors.

While SI can occur in people regardless of age, gender, ethnicity, or socioeconomic status, much of the discourse is centered on adolescents, as this behavior tends to begin during adolescence (Boesky, 2002). Self-injurious behavior typically lasts for five to ten years, but can be longer if not properly treated (Conterio & Lader, 1998). Groups at risk for SI have been defined as those with borderline personality disorder (particularly females age 16 to 25), those who are in a psychotic state (mainly young adult males), children who are emotionally disturbed and/or battered, children who are mentally retarded or autistic, those with a history of self-injury, and those with a history of physical, emotional or sexual abuse (Mosby, 1994, cited by Martinson, 1998). Experts in the field believe that females are more likely to be self-injurers, given that females tend to internalize anger, as opposed to males, who externalize it (Engelgau, 2005). It is estimated that, out of every 200 females between the ages of 13 and 19, at least one will engage in SI (Leboeuf, 2003).

A study cited by Engelgau (2005) broke down the statistics for self-injury as follows:

Cutting	72%
Self-hitting	30%
Pulling hair	22%
Breaking bones	10%
Burning themselves	5%

SI is thought to be a maladaptive coping mechanism that is utilized when the self-injuring youth experiences highly stressful or emotionally overwhelming circumstances. Many youth who engage in SI describe an immediate relief from psychological and physiological tension as the act is

completed (Martinson, 1998; Boesky, 2002). For some, the production of pain is a component of the tension relief.

Adolescents self-injure for a variety of reasons including risk-taking, rebellion, rejection of parental values, or to be accepted (American Academy of Child & Adolescent Psychiatry [AACAP], 1999). Some injure out of desperation, anger, or for attention. Adolescents may attempt to hide the signs of their self-injuries for fear of being rejected or criticized (AACAP).

Additionally, SI is generally not associated with sexual gratification, body decoration (piercing and tattooing), cultural rituals that induce spiritual enlightenment, or trying to be cool or fit in (Focus Adolescent Services, 2001). There are, however, clusters of peer that provide group acceptance of this behavior.

## Causes and Risk Factors

Studies have shown that physical or sexual abuse and trauma are commonly associated with SI. A study found that exposure to sexual or physical abuse, emotional or physical neglect, and chaotic family conditions during childhood, latency, and adolescence strongly predict the number and severity of cutting incidents (Van der Kolk et al., 1991, as cited in Martinson). However, some self-injurers never suffered childhood abuse. Table 1 discusses various risk factors associated with SI.

Table 1

### Risk Factors for Self-Injury

- Being a member of an at-risk group
- Inability to cope with increased psychological/physiological tension in a healthy manner
- Feelings of depression, rejection, isolation, self-hatred, separation anxiety, guilt and depersonalization
- Command hallucinations
- Need for sensory stimuli
- Dysfunctional family

Source: Mosby, 1994, as cited by Martinson, 1998.

A recent study reported in the *Archives of Pediatrics & Adolescent Medicine* details the prevalence of deliberate self-harm (DSH), a term used interchangeably with SI (2007). According to the study, the strongest risk for suicidal behavior, as well as suicidal ideation, takes place in those who engaged in DSH (*Archives of Pediatrics & Adolescent Medicine*). The risk for occasional DSH increased seven times when adolescents reported suicidal thoughts, according to the study (*Archives of Pediatrics & Adolescent Medicine*). The study also points out that, in adolescents where frequent occurrence of suicidal ideation was reported, these youth were 18 times more likely to engage in repetitive DSH (*Archives of Pediatrics & Adolescent Medicine*).

While some believe SI to be in the spectrum of suicidal behavior, there is growing recognition that SI represents a different pattern of interpersonal dynamics that is distinct from clear suicidal intent. Favazza, as quoted in Martinson in 1998, states, "...a person who truly attempts suicide seeks to end all feelings, whereas a person who self-mutilates seeks to feel better." As stated above, studies show that individuals with a history of non-suicidal SI were over nine times more likely to report suicide attempts, and seven times more likely to report a suicide gesture and nearly

six times more likely to report a suicide plan than individuals without a history of non-suicidal self-injury (Whitlock & Knox, as cited by Cornell University, 2007). Nevertheless, most individuals with SI do not consider committing suicide. It may be best understood that, if SI is unsuccessfully addressed, it may lead to suicidal behavior (Cornell University, 2007).

### ***Invalidating Environment***

Abuse aside, it has been suggested that growing up in a chronically invalidating home environment may be a chief factor for SI. Linehan, as cited by Martinson (1998), defines an invalidating environment as one in which the communication of private feelings is met by erratic, inappropriate, or extreme responses. That is, the expression of one's private emotions (painful or otherwise) is not validated, but is instead constantly punished or trivialized, thus dismissing the child's interpretation of his own actions or behaviors, as well as his behaviors' intentions and motivations. Such persistent invalidation, Linehan concluded, can lead to subconscious self-invalidation, distrust, and feelings of low self-worth.

### ***Physical Causes***

Studies have shown that low serotonin levels in the brain are associated with SI in some cases. Researchers have found that self-injurers have fewer platelet imipramine binding sites, which is a marker of serotonin activity. Studies done by Stoff et al., Birmaher et al., and others link low numbers of platelet imipramine binding sites to impulsive behavior and aggression (Martinson, 1998). Thus, it appears that SI may have similarities to other impulse control disorders such as kleptomania or compulsive gambling.

### ***Comorbidity***

Children with autism or mental retardation often exhibit self-injuring behavior. Other conditions with which SI is seen are Borderline Personality Disorder, Mood Disorders, Eating Disorders, Obsessive-Compulsive Disorder, Post-Traumatic Stress Disorder, Dissociative Disorders, Anxiety and/or Panic Disorder, Bipolar Disorder and Impulse Control Disorder Not Otherwise Specified. However, it is important to note that, while many self-injurers may be labeled as or diagnosed with one or more of these conditions, not all self-injurers meet the criteria for these conditions. Clinical studies examining the link between SI and some of these conditions have yet to be done (Martinson, 1998).

For some adolescents who engage in SI, development of Borderline Personality Disorder may carry over into adulthood (AACAP, 1999). It is possible that some young children will outgrow their self-injurious behavior. However, children with SI because of mental retardation and/or autism may continue these behaviors into adulthood (AACAP).

### ***Diagnosis***

The following symptoms are usually present for a diagnosis of SI: preoccupation with physically harming oneself; inability to resist self-injurious behavior resulting in tissue damage; increased tension before and a sense of relief after self-injury; and having no suicidal intent in self-mutilating (Alan, 2004).

Self-injurers tend to be secretive and are creative in disguising their wounds (*The Columbus Dispatch*, 2005). This makes it particularly difficult to diagnose. According to the National Mental Health Association, possible warning signs include unexplained frequent injury, e.g., cuts and

burns, the wearing of long pants/sleeves in warm weather, low self-esteem, difficulty handling feelings, relationship problems, and poor functioning at work, school or home (1998).

## **Treatment**

In treating SI, understanding the dynamics of the disorder and providing structure, safety, and consistency are crucial. The key to helping an adolescent stop engaging in SI as a coping mechanism or stress reliever is to understand why the youth self-injures. Self-injuring youth should have access to non-judgmental, compassionate medical care for their self-inflicted wounds that does not take away their dignity or autonomy (Dallam, as cited in Martinson, 1998). Current approaches to the successful treatment of SI rely heavily on teaching children and adolescents new ways of coping with stressors so that underlying painful feelings can be dealt with (Martinson). In addition, it is helpful for the mental health provider to assess whether there are any comorbid disorders and ascertain the implications they would have on treatment.

There are neither proven treatments for SI nor certainty about which forms of psychosocial and physical treatments are most effective. To date, studies have been inconclusive, due to the insufficient number of patients in trials (Hawton et al., 2002). There is a need for further study in order to ascertain evidence-based treatments for SI. Efficacy of treatment interventions has been measured by the rate of repeated suicidal behavior, but other measures, such as compliance with treatment, depression, hopelessness, and reduced rates of repetition of deliberate self-harm, need to be examined (Hawton et al.).

### ***Promising Treatment Approaches***

Treatment for SI may depend on the combination of dangerous behaviors that the child displays. Treatments shown to have promising results include the following:

*Cognitive Behavioral Therapy* – Cognitive behavioral therapy is generally recommended for treatment of SI. Cognitive behavioral therapy can be used to help combat the cognitive distortions and the belief that SI is an acceptable way to manage feelings (Beck, as cited in Jones, 2001). Two types of treatments within the cognitive behavioral therapy domain were identified to be promising for treatment of SI: Problem Solving Therapy and Dialectical Behavioral Therapy (Muehlenkamp, 2006). The common features of these treatments are that they are structured, time-limited, and emphasize targeting SI along with resolving identified behavior deficits.

Therapy focuses on helping the self-injuring youth to tolerate greater intensities without resorting to self-harm; develop the ability to articulate emotions and needs; and learn alternative, healthy means for discharging these feelings, such as problem solving, conflict resolution, anger management, and assertiveness training (Rosen, Suyemoto & MacDonald, as cited by the Suicide Information & Education Centre [SIEC], 2001).

*Behavior Modification* – Behavior modification may be used to eliminate some behaviors while establishing others (Jones, 2001). Generating alternative behaviors that can be utilized in lieu of SI and shaping the use of them is an effective method to employ.

*Addictions Model* – An addictions model may be useful in very chronic cases. The addictions model is used to help the child or adolescent develop a sense of control over their life in other, more realistic ways. This model emphasizes techniques that help in building time between having the urges and acting on those urges (Alderman, as cited in Jones, 2001).

*Self-Injury Implicit Association Test* - A performance-based measure of self-injurious thoughts, this test is used as a way of predicting behavior. The behavioral test uses individuals' response times to measure the implicit associations they hold about self-injury (*American Journal of Psychiatry*, 2007).

When working with youth who have engaged in SI, it is important for providers to establish a strong working alliance to more effectively target SI behaviors. Once a strong therapeutic alliance is formed, the primary goal is to reduce and ultimately eliminate SI by replacing SI behaviors with healthier coping skills (Muehlenkamp, 2006). Table 2 outlines alternative behaviors for self-injuring youth.

Table 2

**Alternative Behaviors and Thinking Strategies  
for Self-Injuring Youth**

- Increase ability to tolerate emotional distress
- Stay focused in the present
- Develop ways to self-soothe
- Find ways to distract yourself
- Postpone the self-injury
- Seek and try alternatives
- Choose the option that is the least damaging
- Carry only “safe” objects with you
- Find alternative means to express yourself, e.g., art, journaling
- Know what triggers the self-injury

Source: *Healing Magazine*, 2003.

***Pharmacological Treatment***

Medications such as Selective Serotonin Reuptake Inhibitors (SSRIs) and opiate antagonists have been studied to control SI, but evidence of the effectiveness of pharmacological treatment of this behavior is inconclusive (Martinson, 1998). However, it appears that the most promising treatments are high-dose SSRIs and, in some cases, atypical neuroleptics (Martinson). For many individuals, a trial of medication may be a part of the treatment. There is virtually no situation in which medication alone would be appropriate treatment.

A more detailed discussion of the use of antidepressants in treating children and adolescents is included in the “Antidepressants and the Risk of Suicidal Behavior” section of the *Collection*.

***Hospitalization***

Hospitalization is usually used as a last resort in the treatment of SI. Self-injuring youth are hospitalized in order to prevent them from hurting themselves, and intensive individual and group therapy, as well as medications, are readily available (Clarke, as cited by SIEC, 2001). However, hospitals are “artificially safe” environments, and it is more important to understand the feelings

behind the self-injuring behavior and to teach better coping mechanisms that can be practiced in the real world (Martinson, 1998).

### ***Family Involvement***

Establishing and maintaining meaningful connections between family and teens is helpful for treating self-injury (Selekman, 2002). Self-injurious behavior can be especially harmful if the adolescent is also abusing drugs or alcohol; parents may address this issue by setting a model for their teenager, demonstrating responsible use of alcohol and displaying healthy ways of managing stress (Selekman).

## **Conclusion**

A recent survey conducted by Cornell University indicated that SI had become increasingly prevalent in the last several years (Cornell University, 2007). This increase may be due to several combined factors, including an increasing number of youth who are actually engaging in the behavior, the greater likelihood that youth who engage in SI are seeking help, or an improved ability among service providers to correctly identify and report SI (Cornell). SI is very complex and is tied closely with other comorbid disorders, thus treatment effects may be difficult to maintain (Muehlenkamp, 2006). Flexibility and perseverance from the service provider are the most important elements to effectively treating SI.

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### **Organizations/Weblinks**

#### **American Academy of Child & Adolescent Psychiatry (AACAP)**

Self-Injury in Adolescents

<http://www.aacap.org>

#### **Dominion Hospital**

2960 Sleepy Hollow Road - Falls Church VA 22044

703-536-2000

<http://www.dominionhospital.com>

#### **Focus Adolescent Services**

Self-Injury

<http://www.focusas.com/SelfInjury.html>

#### **Kennedy Krieger Institute**

707 North Broadway - Baltimore, MD 21205

443-923-2900

[http://www.kennedykrieger.org/kki\\_staff.jsp?pid=1888](http://www.kennedykrieger.org/kki_staff.jsp?pid=1888)

#### **National Mental Health Association (NMHA)**

2001 N. Beauregard Street, 12th Floor - Alexandria, VA 22311

703-684-7722

Mental Health Resource Center

800-969-NMHA - TTY Line 800-433-5959

#### **S.A.F.E. Alternatives (Self-Abuse Finally Ends)**

7115 W. North Avenue, Suite 319 - Oak Park, IL 60302

800-DON'T CUT (366-8288)

<http://www.selfinjury.com>